Introduction:

The gaining popularity of YouTube as a platform for content creation, consumption and monetization has sparked significant interest in understanding the dynamics that influence viewer engagement and potential sales success. I aim to investigate the impact of YouTube video characteristics and creator demographics on viewer engagement metrics such as views, likes, and comments in this empirical research. I am interested in media, and data analysis. Combining my personal interests to bring out impactful insights is the idea or the root cause of this analysis.

Literature review:

Some studies have identified factors like viewing behaviours and self-perceived importance of various variables controlled by content creators while creating a successful educational science YouTube video (Beautemps and Bresges, 2021). Some have examined "the types of ads on YouTube and possible conversion rates of views into revenue" (Elango, D, 2019). In this study, I am looking to do a generic observation of the factors that influence any type of video on YouTube. Apart from the content quality of a YouTube video, there are other supporting factors that influence the viewer engagement.

The outcome variables in this study are the total number of views, likes, and comments any YouTube video receives. These variables are otherwise called as viewer/ consumer engagement which are considered as a primary driver of sales growth, enhancing profitability (Brodie et al, 2011). In another study, Sardar et al (2024) concludes that consumer engagement mediates between source credibility, content characteristics, and purchase intention, in the fashion industry.

The main predictor variable in this research is Total channel subscribers because of its strong correlation with the number of views a YouTube video gains. "Thus, there is an obvious, strong correlation between the number of subscribers and the number of views. There is also a weak correlation between the number of videos uploaded and the number of views, which leads to the conclusion that subscribers are loyal to channels when watching their videos; however, when the content is no longer interesting to them, they unsubscribe (Lupșa-Tătaru and Lixăndroiu, 2022). Also, GMI Blogger (2024) states that the popularity of a YouTube channel can be based on two factors. the number of subscribers it has acquired and the total views it has generated for its videos. Mr Beast boasts 307 million subscribers and 55 billion views on YouTube. Therefore, a channel's total subscribers is considered a key factor in determining the success of a YouTube video.

Pederson (2015) lists down four considerations when determining the length of the online video content while also stating that “Marketers have just 10 seconds to capture and engage an audience before they continue to scroll down or click away; and engagement drops off significantly beyond that. If you have not fully engaged your audience after the first 30 seconds, you've likely lost 33% of viewers; and after one minute, 45% of viewers have stopped watching”. Once a user is engaged with a video, they are likely to continue watching it to completion. Determining the optimal length that encourages viewers to like or comment is another explanatory variable we will consider.

High definition videos tends to have received ‘positive’ comments with ‘happy’ emotion on Koha and Dspace videos (Deori et all, 2023). This is an indication that the identifying the desirable quality/ resolution of the video is crucial to the video’s positive viewer engagement. Taken together, we propose the following research question about viewer engagement with videos on YouTube, which has particular relevance to sales success.

Which YouTube video and creator characteristics are the strongest predictors of high viewer engagement, suggesting potential sales success?

I selected this dataset from Kaggle because it offers comprehensive information on YouTube videos and their creators, consisting of 21 variables for 1096 videos. Collected in 2022 by business analyst interns from KultureHire, the dataset aims to analyze the success ratio of YouTube content creators. Each row corresponds to a different video, with columns detailing various aspects such as video characteristics (e.g., duration, language, subtitles), creator demographics (e.g., total subscribers), and viewer engagement metrics (e.g., number of views, likes, comments). The dataset's thoroughness and lack of known limitations make it ideal for examining factors that contribute to video success on YouTube.

While Scott E (2000) states that “no single method is deemed superior, but rather examples show that a combination of methods is likely to be most valuable in many situations”. In my empirical research, I opted for regression analysis over other methods because of its simplicity and interpretability, enabling a clear understanding of the relationships between multiple independent variables and the dependent variable. It quantifies the effect size of each predictor, facilitates the examination of multiple variables simultaneously, and provides predictive power for practical applications in optimizing video content. Additionally, regression analysis supports statistical significance testing, adding rigor to the analysis, making it a robust choice for investigating factors influencing viewer engagement on YouTube (Kutner et al., 2004; James et al., 2013).

Conclusion:

Our study reveals that several key factors significantly influence viewer engagement on YouTube. Channels with a larger subscriber base, videos that include subtitles, and those that maintain a substantial video library tend to attract more views. Additionally, higher video resolutions (720px and above) are linked to increased viewer interaction. These findings highlight the importance of cultivating a loyal subscriber base, incorporating subtitles for accessibility, and consistently producing high-definition content. Content creators and marketers can leverage these insights to refine their strategies, ultimately enhancing engagement and sales potential on the platform.

References:

Beautemps, J., & Bresges, A. (2021). What comprises a successful educational science YouTube video? A five-thousand user survey on viewing behaviors and self-perceived importance of various variables controlled by content creators. Retrieved from https://www.researchgate.net/publication/350181644_What_Comprises_a_Successful_Educational_Science_YouTube_Video_A_Five-Thousand_User_Survey_on_Viewing_Behaviors_and_Self-Perceived_Importance_of_Various_Variables_Controlled_by_Content_Creators

Elango, D. (2019). Social media video creators monetization and business on YouTube. Retrieved from http://dx.doi.org/10.2139/ssrn.3320253

Brodie RJ, Ilic A, Juric B, Hollebeek L. Consumer engagement in a virtual brand community: An exploratory analysis. Journal of Business Research. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0148296311002657

Sardar, Sainaz & Tata, Sai Vijay & Sarkar, Subhro, 2024. Examining the influence of source factors and content characteristics of influencers' post on consumer engagement and purchase intention: A moderated analysis. Retrieved from https://ideas.repec.org/a/eee/joreco/v79y2024ics096969892400184x.html

Lupșa-Tătaru, D.A.; Lixăndroiu, R. YouTube Channels, Subscribers, Uploads and Views: A Multidimensional Analysis of the First 1700 Channels from July 2022. Sustainability **2022**, 14, 13112. Retrieved from https://www.mdpi.com/2071-1050/14/20/13112

GMI Blogger. Youtube statistics 2024 (demographics, users by country & more). Retrieved from https://www.globalmediainsight.com/blog/youtube-users-statistics/#Top_10_YouTube_Channels_Revenue

Pedersen Mary, (2015) best practices: what is the optimal length for video content? Retrieved from https://adage.com/article/digitalnext/optimal-length-video-content/299386

Deori et all (2023), Analysis of youtube video contents on Koha and dspace, and sentiment analysis of viewers' comments. Retrieved from 10.1108/LHT-12-2020-0323

Maxwell, S. E. (2000). Sample size and multiple regression analysis. Psychological Methods. Retrieved from https://doi.org/10.1037/1082-989X.5.4.434

Kutner, Michael H. Applied linear statistical models.-5th ed.! Michael H Kutner et al. Retrieved from https://users.stat.ufl.edu/~winner/sta4211/ALSM_5Ed_Kutner.pdf